

REMARKS

Pending Claims

Claim 7 has been canceled without prejudice or disclaimer. Claims 1-6 and 8-10 remain pending.

Specification and Drawings

The specification has been amended as required to delete the references to Figs. 1D and 3D on page 4 thereof, since the application does not contain these figures.

Figs 1A-1C and 2A-2D have been labeled with the legend Prior Art. Replacement sheets of drawings are submitted herewith.

Priority

Applicants appreciate the Examiner's acknowledgment of the claim for priority and receipt of the priority document.

35 U.S.C. §112

Claim 2 has been amended to overcome the 35 U.S.C. §112, second paragraph rejection.

35 U.S.C. §§ 102 and 103

Claims 1-3 and 5-9 are rejected under 35 U.S.C. §102(b) as being anticipated by Sturdivant et al. Claims 1, 3-5 and 8 are rejected as being anticipated under 35 U.S.C. §102(b) by Hirabayashi. Further, claim 10 is rejected as being unpatentable over Sturdivant in view of Kennedy under 35 U.S.C. § 103. Applicants request reconsideration of the rejections for the following reasons.

Sturdivant discloses an interconnection between coplanar waveguide (CPWG) transmission lines. The Examiner states that Sturdivant discloses an interconnect including a conductor that coats the ends and outer surfaces of the substrates. However, Applicants disagree with this interpretation of the reference.

As shown in Fig. 4 of Sturdivant, the CPWG lines 60, 80 are formed on substrates 52, 72, which are fabricated of a dielectric material. Conductor strips 82 and 62 (areas shown without cross hatching) are "disposed between and spaced from" the ground planes 64a, 64b and 84a, 84b, respectively. See col. 4, lines 33-43 of Sturdivant. The spacing is shown in Fig. 4 with areas that are cross hatched. Further, the ground planes 64a, 64b, 84a, 84b are shown without cross hatching to extend and cover the side surfaces of the substrate.

Accordingly, the end surfaces of the substrate (cross-hatched area) are shown as being exposed rather than being covered with a conductor.

In the present invention, the conductor disposed on the end surface of the first transmission line is claimed to substantially cover the end surface of the first dielectric plate (claims 1 and 9). Similarly, in claim 8, the conductor is claimed as covering the dielectric plate at the end surface of the first transmission line. Accordingly, Sturdivant does not anticipate the invention as claimed in claims 1-3 and 5-9.

Hirabayashi is relied upon for teaching a filter including a connecting structure for a transmission line wherein the lines are connected together by a via hole and the conductor is disposed to cover the end surface near the via connections. However, Applicants respectfully traverse the rejection.

In Hirabayashi, the end surface near the via connections is shown by the arrow 13(1) in Fig. 1. Accordingly, the end surface near the via connections referred to in the Office Action refers to the side surfaces of the transmission lines 16(1) and 16(2). Accordingly, Hirabayashi does not disclose the claimed combination of the present invention which includes a conductor disposed on the end surface of the first

transmission line that substantially covers the end surface of the first dielectric plate (claims 1 and 9), or a conductor that covers the dielectric plate at the end surface of the first transmission line (claim 8). Therefore, the 35 U.S.C. § 102 rejection of the claims based on Hirabayashi should be withdrawn.

The rejection of claim 10 under 35 U.S.C. §103 should be withdrawn at least since claim 10 depends from claim 9, which is not disclosed by Sturdivant. Further, the combination of Sturdivant and Kennedy does not overcome the deficiency in Sturdivant with respect to the lack of disclosure of a conductor disposed on an end surface of a first transmission line that substantially covers an end surface of a first dielectric plate, as claimed. Accordingly, claim 10 should be allowed.

Conclusion

In view of the foregoing amendments and remarks,
reconsideration and reexamination are respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "John R. Mattingly", with a large, sweeping flourish extending from the end of the signature.

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